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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)



Applicant's or agent's file reference K1405 PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/US 03/25662	International filing date (day/month/year) 15.08.2003	Priority date (day/month/year) 17.08.2002
International Patent Classification (IPC) or both national classification and IPC H05K9/00		
Applicant 3M INNOVATIVE PROPERTIES COMPANY		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 15.03.2004	Date of completion of this report 09.11.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Schneider, F Telephone No. +31 70 340-1003 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/US 03/25662**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-44 as originally filed

Claims, Numbers

1-31 as originally filed

Drawings, Sheets

1/13-13/13 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-31
	No: Claims	
Inventive step (IS)	Yes: Claims	1-31
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-31
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US03/25662

Re Item V

The application relates to a conductive film (claim 1) and a method for forming a conductive film (claim 17).

As closest prior art is considered D1 (=US 4 965 408) disclosing a conductive film for EMI shielding comprising a flexible support, an extensive metal layer, a polymeric protective layer.

The subject-matter of claim 1 differs from D1 in that the protective layer of said film is made of crosslinked polymer and in that said film has at least one permanently deformed curved region.

The subject-matter of claim 1 thus is new (Art 33(2) PCT).

With respect to inventive step, the above mentioned distinguishing features enable the film to be, stretched, deformed and adhered over a non-planar substrate without cracking or creasing.

The technical problem to be solved may therefore be regarded as 'to provide a conductive film capable to be stretched, deformed in order to adopt a non-planar configuration without cracking or creasing'.

The other document cited in the search report D2 (=EP 873 839) discloses a composite magnetic sheet suitable for suppressing electromagnetic interference provided with embossed unevenness formed on both sides thereof in order to improve its EMI shielding performance. Therefore D2 teaches away from the solution suggested in claim 1.

Thus an inventive step is considered to be apparent (Art. 33(3) PCT).

Concerning the independent method claim 17, said method comprises all the steps for forming the new and inventive conductive film of claim 1. Therefore, independent claim 17 is regarded as new and inventive (Art 33(2)(3) PCT).

The rest of the claims are dependent on claims 1 and 17 and as such also meet the requirements of Art 33(2)(3) PCT with respect to novelty and inventive step.

The industrial applicability of the claims is also apparent (Art 33(4) PCT).